Design the PDA for the following Languages. Also write the first ten strings of each language.

1. John C Martin Exercise 5.25; 5.5, 5.8, 5.18, 4.10, 4.13
2. All nonempty strings that start and end with the same symbol.
3. All strings with more a's than b's.
4. All strings with twice a's than b's.
5. L={(ab)m cn dn (c)m ;m,n>0 }
6. L={ai bi cj dj ;i,j>0 }
7. L={ai bj cj di ;i,j>0 }